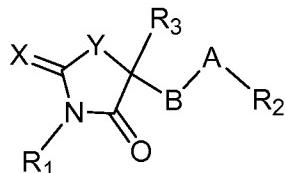


## **Amendments to the Claims**

The following listing of claims will replace all prior versions and listings of claims in the application.

### **Listing of Claims:**

1. (Currently amended) A composition comprising a compound of the formula



or pharmaceutically acceptable salts thereof together with a pharmaceutically acceptable carrier, excipient, or diluent, wherein

A is aryl or heteroaryl furan;

B is C<sub>1</sub>-C<sub>6</sub> alkyl or C<sub>2</sub>-C<sub>6</sub> alkenyl;

X is sulfur, oxygen, =CR<sub>4</sub>R<sub>5</sub>, =NR<sub>4</sub>, =NC(O)R<sub>4</sub>, or =NSO<sub>2</sub>R<sub>4</sub>,

Y is sulfur, oxygen, ~~C(R<sub>4</sub>)(R<sub>5</sub>)~~, ~~N(R<sub>4</sub>)~~, ~~NC(O)(R<sub>4</sub>)~~, ~~NSO<sub>2</sub>(R<sub>4</sub>)~~, ~~S(O)<sub>2</sub>^-~~, or ~~-S(O)-~~;

R<sub>1</sub> is ~~H~~, -NH<sub>2</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>2</sub> alkenyl, C<sub>1</sub>-C<sub>6</sub> alkyl-S-C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)OR<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-heterocyclyl, C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl, -NH-SO<sub>2</sub>-aryl, -C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)NR<sub>6</sub>R<sub>7</sub>, -C<sub>0</sub>-C<sub>6</sub> alkyl-C(S)NR<sub>6</sub>R<sub>7</sub>, C<sub>0</sub>-C<sub>6</sub> alky-heteroaryl-aryl, -NHC(O)-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)NH-C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-O-R<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-heterocyclyl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl, -SO<sub>2</sub>-R<sub>6</sub>, C(O)-R<sub>6</sub> or -C(O)-OR<sub>6</sub>, wherein each one of the alkyl, aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R<sub>5</sub>;

R<sub>2</sub> is -H, halogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl, -NO<sub>2</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-OR<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-heterocyclyl, C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl, -N(R<sub>6</sub>)-C(O)NR<sub>6</sub>R<sub>7</sub>, -NHSO<sub>2</sub>-aryl, C<sub>0</sub>-C<sub>6</sub> alky-heteroaryl-aryl or -C(O)-R<sub>6</sub>, wherein each one of the aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R<sub>4</sub>;

R<sub>3</sub> is -H, C<sub>1</sub>-C<sub>6</sub> alkyl or C<sub>2</sub>-C<sub>6</sub> alkenyl; or

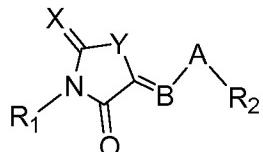
R<sub>3</sub> and B together with the carbon atom to which they are attached form an alkenyl or a spirocyclic ring;

R<sub>4</sub> is halogen, oxo, -C(O)OR<sub>6</sub>, -NO<sub>2</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl optionally substituted with halo, -C<sub>1</sub>-C<sub>6</sub> alkoxy optionally substituted with halo, -CH<sub>3</sub>, -SO<sub>2</sub>NH<sub>2</sub> or -C(O)-OR<sub>6</sub>;

R<sub>5</sub> is halogen, oxo, C<sub>1</sub>-C<sub>6</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>0</sub>-C<sub>6</sub> alkyl-aryl, -NO<sub>2</sub>, di(C<sub>1</sub>-C<sub>6</sub> alkyl)amino, -CF<sub>3</sub>, -OH, -SO<sub>2</sub>NH<sub>2</sub> or -C(O)-OR<sub>6</sub>; and

R<sub>6</sub> and R<sub>7</sub> are independently -H, halogen, C<sub>1</sub>-C<sub>6</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, aryl, di(C<sub>1</sub>-C<sub>6</sub> alkyl)amino, -CF<sub>3</sub>, -OH or -C(O)-OR<sub>6</sub>.

2. (original) The composition according to claim 1 wherein the compound is of the formula



3. (original) The composition according to claim 2 wherein the compound is of the formula

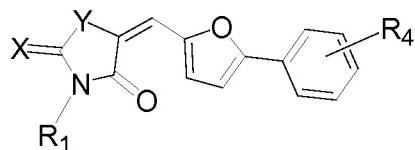


4. (Currently amended) The composition according to claim 3 wherein R<sub>1</sub> is -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>2</sub> alkenyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)OR<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-heterocyclyl, C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl or C<sub>0</sub>-C<sub>6</sub> alky-heteroaryl-aryl, and R<sub>2</sub> is -H, halogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl.

5. (Currently amended) The composition according to claim 4 wherein R<sub>1</sub> is -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>2</sub> alkenyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl, or C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)OR<sub>6</sub> and R<sub>2</sub> is C<sub>0</sub>-C<sub>6</sub> alky-aryl.

6. (Currently amended) The composition according to claim 5 wherein R<sub>1</sub> is -H, allyl, phenyl or benzyl and R<sub>2</sub> is phenyl.

7. (original) The composition according to claim 3 wherein the compound is of the formula

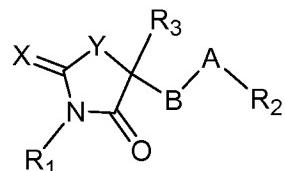


8. (Currently amended) The composition according to claim 7 wherein R<sub>1</sub> is -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>2</sub> alkenyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)OR<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-heterocyclyl, C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl or C<sub>0</sub>-C<sub>6</sub> alky-heteroaryl-aryl, and R<sub>4</sub> is halogen, oxo, -NO<sub>2</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, -C<sub>1</sub>-C<sub>6</sub> alkoxy, -CF<sub>3</sub>, -SO<sub>2</sub>NH<sub>2</sub>, or -C(O)-OR<sub>6</sub>.

9. (Currently amended) The composition according to claim 8 wherein R<sub>1</sub> is -H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>2</sub> alkenyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl, or C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)OR<sub>6</sub>, and R<sub>4</sub> is halogen, -NO<sub>2</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, -C<sub>1</sub>-C<sub>6</sub> alkoxy, -CF<sub>3</sub>, -SO<sub>2</sub>NH<sub>2</sub>, or -C(O)-OR<sub>6</sub>.

10. (Currently amended) The composition according to claim 9 wherein R<sub>1</sub> is -H, allyl, phenyl or benzyl and R<sub>4</sub> is chloro, bromo, fluoro, -NO<sub>2</sub>, -OCH<sub>3</sub>, -CF<sub>3</sub> or -C(O)-OH.

11. (Currently amended) A composition comprising a compound of the formula



or a pharmaceutically acceptable salts thereof together with a pharmaceutically acceptable carrier, excipient, or diluent, wherein  
A is aryl or heteroaryl furan;  
B is C<sub>1</sub>-C<sub>6</sub> alkyl or C<sub>2</sub>-C<sub>6</sub> alkenyl;  
X is sulfur, oxygen, =CR<sub>4</sub>R<sub>5</sub>, =NR<sub>4</sub>, =NC(O)R<sub>4</sub>, or =NSO<sub>2</sub>R<sub>4</sub>,  
Y is sulfur, oxygen, -C(R<sub>4</sub>)(R<sub>5</sub>), -N(R<sub>4</sub>), -NC(O)(R<sub>4</sub>), -NSO<sub>2</sub>(R<sub>4</sub>), -S(O)<sub>2</sub>-, or -S(O)-;  
R<sub>1</sub> is -H, -NH<sub>2</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>2</sub> alkenyl, C<sub>1</sub>-C<sub>6</sub> alkyl-S-C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)OR<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-heterocyclyl, C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl, -NH-SO<sub>2</sub>-aryl, -C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)NR<sub>6</sub>R<sub>7</sub>, -C<sub>0</sub>-C<sub>6</sub> alkyl-C(S)NR<sub>6</sub>R<sub>7</sub>, C<sub>0</sub>-C<sub>6</sub> alky-heteroaryl-aryl, -NHC(O)-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)NH-C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-O-R<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl, -SO<sub>2</sub>-R<sub>6</sub>, C(O)-R<sub>6</sub> or -C(O)-OR<sub>6</sub>, wherein each one of the alkyl, aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R<sub>5</sub>;

R<sub>2</sub> is -H, halogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl, -NO<sub>2</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-OR<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-heterocyclyl, C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl, -N(R<sub>6</sub>)-C(O)NR<sub>6</sub>R<sub>7</sub>, -NHSO<sub>2</sub>-aryl, C<sub>0</sub>-C<sub>6</sub> alky-heteroaryl-aryl or -C(O)-R<sub>6</sub>, wherein each one of the aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R<sub>4</sub>;

R<sub>3</sub> is -H, C<sub>1</sub>-C<sub>6</sub> alkyl or C<sub>2</sub>-C<sub>6</sub> alkenyl; or

R<sub>3</sub> and B together with the carbon atom to which they are attached form an alkenyl or a spirocyclic ring;

R<sub>4</sub> is halogen, oxo, -C(O)OR<sub>6</sub>, -NO<sub>2</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl optionally substituted with halo, -C<sub>1</sub>-C<sub>6</sub> alkoxy optionally substituted with halo, -CF<sub>3</sub>, -SO<sub>2</sub>NH<sub>2</sub> or -C(O)-OR<sub>6</sub>;

R<sub>5</sub> is halogen, oxo, C<sub>1</sub>-C<sub>6</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>0</sub>-C<sub>6</sub> alkyl-aryl, -NO<sub>2</sub>, di(C<sub>1</sub>-C<sub>6</sub> alkyl)amino, -CF<sub>3</sub>, -OH, -SO<sub>2</sub>NH<sub>2</sub> or -C(O)-OR<sub>6</sub>; and

R<sub>6</sub> and R<sub>7</sub> are independently -H, halogen, C<sub>1</sub>-C<sub>6</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, aryl, di(C<sub>1</sub>-C<sub>6</sub> alkyl)amino, -CF<sub>3</sub>, -OH or -C(O)-OR<sub>6</sub>,

provided the compound is not a compound of the formula



X and Y are independently sulfur, oxygen, -CR<sub>4</sub>R<sub>5</sub>, -NR<sub>4</sub>, -NC(O)R<sub>4</sub>, -NSO<sub>2</sub>R<sub>4</sub>, -SO<sub>2</sub>, or -SO;

R<sub>1</sub> is -H, -NH<sub>2</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>2</sub> alkenyl, C<sub>1</sub>-C<sub>6</sub> alkyl-S-C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)OR<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-heterocyclyl, C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl, -NH-SO<sub>2</sub>-aryl, -C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)NR<sub>6</sub>R<sub>7</sub>, -C<sub>0</sub>-C<sub>6</sub> alkyl-C(S)NR<sub>6</sub>R<sub>7</sub>, C<sub>0</sub>-C<sub>6</sub> alky-heteroaryl-aryl, -NHC(O)-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)NH-C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-O-R<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-aryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-heterocyclyl, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-NH-C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl, -SO<sub>2</sub>-R<sub>6</sub>, C(O)-R<sub>6</sub>, or -C(O)-OR<sub>6</sub>, wherein each one of the alkyl, aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R<sub>5</sub>;

R<sub>2</sub> is -H, halogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>0</sub>-C<sub>6</sub> alky-aryl, -NO<sub>2</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-C(O)-OR<sub>6</sub>, C<sub>0</sub>-C<sub>6</sub> alkyl-heteroaryl, C<sub>0</sub>-C<sub>6</sub> alkyl-heterocyclyl, C<sub>0</sub>-C<sub>6</sub> alkyl-carbocyclyl, -N(R<sub>6</sub>)-

C(O)NR<sub>6</sub>R<sub>7</sub>, -NHSO<sub>2</sub>-aryl, C<sub>0</sub>-C<sub>6</sub> alky-heteroaryl-aryl, or -C(O)-R<sub>6</sub>, wherein each one of the aryl, heteroaryl, heterocyclic and carbocyclyl are optionally substituted with one or more R<sub>4</sub>;

R<sub>4</sub> is halogen, oxo, -C(O)OR<sub>6</sub>, -NO<sub>2</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl optionally substituted with halo, -C<sub>1</sub>-C<sub>6</sub> alkoxy optionally substituted with halo, -CF<sub>3</sub>, -SO<sub>2</sub>NH<sub>2</sub>, or -C(O)-OR<sub>6</sub>;

R<sub>5</sub> is halogen, oxo, C<sub>1</sub>-C<sub>6</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>0</sub>-C<sub>6</sub> alkyl-aryl, -NO<sub>2</sub>, di(C<sub>1</sub>-C<sub>6</sub> alkyl)amino, -CF<sub>3</sub>, -OH, -SO<sub>2</sub>NH<sub>2</sub>, or -C(O)-OR<sub>6</sub>; and

R<sub>6</sub> and R<sub>7</sub> are independently -H, halogen, C<sub>1</sub>-C<sub>6</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, aryl, di(C<sub>1</sub>-C<sub>6</sub> alkyl)amino, -CF<sub>3</sub>, -OH, or -C(O)-OR<sub>6</sub>.

12. (Withdrawn) A method of inhibiting ubiquitination in a cell comprising contacting a cell in which inhibition of ubiquitination is desired with a composition according to claim 1.
13. (Withdrawn) The method according to claim 12 wherein the cell is from a mammal.
14. (Withdrawn) The method according to claim 13 wherein the mammal is human.
15. (Withdrawn) A method of treating cell proliferative diseases or conditions comprising administering to a patient an effective amount of a composition according to claim 1.
16. (Withdrawn) The method according to claim 15 wherein the cell proliferative diseases are cancers.
17. (Withdrawn) The method according to claim 16 wherein the patient is human.
18. (Withdrawn) A method of inhibiting ubiquitination in a cell comprising contacting a cell in which inhibition of ubiquitination is desired with a composition according to claim 2.
19. (Withdrawn) A method of inhibiting ubiquitination in a cell comprising contacting a cell in which inhibition of ubiquitination is desired with a composition according to claim 3.
20. (Withdrawn) A method of inhibiting ubiquitination in a cell comprising contacting a cell in which inhibition of ubiquitination is desired with a composition according to claim 7.